

f) depositing a third dielectric layer on the second dielectric layer, wherein the second and third dielectric layers comprise materials having dissimilar etching characteristics;

g) depositing a second mask layer on the third dielectric layer, wherein the second mask layer includes a trench pattern overlaying the first via pattern and having a width P, such that T exceeds P by a measure M;

h) anisotropically etching the trench pattern through the third dielectric layer, thereby forming (1) a first trench in the third dielectric layer and (2) a second via pattern;

i) anisotropically etching the second via pattern through the first dielectric layer, thereby forming a via hole extending to the substrate; and

j) anisotropically etching the first trench through the second dielectric layer, thereby forming a second trench extending through the second and third dielectric layers, wherein the via hole and second trench are adapted for fabricating a dual damascene structure.

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11. (once amended) The method of claim 1 additionally comprising simultaneously filling the trench and the via hole with a conductive material, whereby a dual damascene structure is formed.

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C4

13. (once amended) A method of forming a structure on a substrate, the method comprising:

a) forming a dielectric stack including an etch stop layer;

b) depositing a first mask layer on the etch stop layer wherein the first mask includes: (1) a first via pattern, (2) a second via pattern and (3) a sacrificial etch pattern positioned between the first and second via patterns such that the sacrificial etch pattern has a width W;

c) anisotropically etching the first and second via patterns through the etch stop layer and forming a sacrificial etch segment by anisotropically etching the sacrificial etch pattern through the etch stop layer;

d) forming a first trench on the etch stop layer, such that the first trench does not overlay the sacrificial etch segment;

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e) forming a second trench on the etch stop layer, such that (1) the second trench does not overlay the sacrificial etch segment and (2) the sacrificial etch segment is positioned between the first and second trenches;

f) forming a first via hole underlying the first trench, such that the first via hole communicates with the first trench; and

g) forming a second via hole underlying the second trench, such that the second via hole communicates with the second trench, wherein: (1) the first trench and the first via hole, and (2) the second trench and the second via hole are adapted for forming a first dual damascene structure and a second dual damascene structure respectively.

14. (once amended) The method of claim 13 additionally comprising:

a) forming the first trench at a distance D from the second trench; and

b) forming the sacrificial etch segment at a width W, such that D exceeds W by a measure N.

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19. (once amended) A method of forming a structure on a substrate, the method comprising:

a) depositing a first dielectric layer on the substrate;

b) depositing a second dielectric layer on the first dielectric layer, wherein the first and second dielectric layers comprise materials having dissimilar etching characteristics;

c) depositing a first mask layer on the second dielectric layer wherein the first mask includes: (1) a first via pattern having a width T, (2) a second via pattern and (3) a sacrificial etch pattern positioned between the first and second via patterns such that the sacrificial etch pattern has a width W;

d) anisotropically etching the first and second via patterns through the second dielectric layer and forming a sacrificial etch segment by simultaneously anisotropically etching the sacrificial etch pattern through the second dielectric layer;

e) removing the first mask layer;

f) depositing a third dielectric layer on the second dielectric layer, wherein the second and third dielectric layers comprise materials having dissimilar etching characteristics;

g) depositing a second mask layer on the third dielectric layer, wherein the second mask layer includes: (1) a first trench pattern overlaying the first via pattern and the third dielectric layer, and having a width P and (2) a second trench pattern overlaying the second via pattern and the third dielectric layer, and having a distance D between the first and second trench patterns wherein D exceeds W by a measure N ;

h) anisotropically etching the first and second trench patterns through the third dielectric layer, thereby forming a first trench and a second trench, additionally forming a third and a fourth via pattern; and

i) anisotropically etching the third and fourth via patterns through the first dielectric layer, thereby forming a first via hole and a second via hole, wherein (1) the first trench and the first via hole are adapted for forming a first dual damascene structure and (2) the second trench and second via hole are adapted for forming a second dual damascene structure.

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21. (once amended) ^C The method of claim 19 wherein a cap layer is interposed between the substrate and the first dielectric layer.

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29. (once amended) The method of claim 19 additionally comprising simultaneously filling: (1) the first trench and the first via hole, and (2) the second trench and the second via hole with a conductive material, whereby first and second dual damascene structures are formed.

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31. (once amended) ^C The method of claim 19 wherein T exceeds P by a measure M .

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Respectfully submitted,

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